

VI.—*Saldanha Bay and its Bird-Islands.* By W. L. SCLATER,
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ABOUT seventy miles north of Table Bay, on the western coast of Cape Colony, lies the magnificent land-locked arm of the sea known as Saldanha Bay. Completely sheltered from every wind, with an ample depth of water and an area for anchorage sufficient to accommodate the bulk of the British Navy, it has one drawback, the scarcity of fresh water, which has hitherto prevented any great use being made of it as a harbour.

Joris van Spilbergen, a Dutch navigator who sailed from Zeeland in 1601, first discovered this bay, and by a misapprehension attached to it the name of the Portuguese Admiral, Saldanha, who a hundred years previously, in 1503, had been the first to enter Table Bay and to ascend Table Mountain.

For the first hundred years after its discovery and until Spilbergen's voyage Table Bay had been known as Saldanha Bay, and did geographers attach the same importance to "priority" in nomenclature as do some of our ornithological friends, there is no doubt that the old name of Saldanha would be revived for our present Table Bay, while a new title would have to be invented and applied to the present Saldanha Bay. Even in the time of Van Riebeck, who founded the settlement at the Cape in 1652, Saldanha Bay and its islands were noted for the abundance of their sea-birds; and the old records often refer to expeditions made there to procure a supply of eggs, which were used for consumption at the settlement, while seal-skins obtained by the slaughter of the Cape Seal (*Arctocephalus pusillus*) were also collected and found to be a valuable article of export.

Probably the first naturalist who visited Saldanha Bay was Levaillant, the well-known French traveller and ornithologist. Soon after his arrival at the Cape, in 1781, he proceeded to Saldanha Bay on board the 'Middelburg,' one of the ships of the Dutch fleet which was ordered that year to retire there to avoid an English expedition under

Commodore Johnston, which was known to be sailing for the Cape. Levaillant spent three months at Saldanha Bay and in its environs and made considerable collections. He visited Schaap or Sheep Island, and gives an account of the numerous rabbits there. He also visited a bird-island which he calls "Dassen" Island, but which appears, from his description of it, to have been Marcus Isle. He noticed the large number of sea-birds nesting there, and gave a description of the Penguins. Finally, he had the mortification of seeing the Dutch ships all fall into the hands of the English under Commodore Johnston, who appeared unexpectedly in the Bay, having obtained information that the Dutch were lying there. The 'Middelburg,' on which Levaillant was living, was the only ship which was not captured. She was fired by her skipper, Van Gemep, and sunk in shallow water in Hoetjes Bay. There she still lies, and was being explored for treasure by divers during my recent visit. They had then found little except some Chinese crockery, which apparently had formed the greater part of her cargo.

During the last year a good deal of attention has been attracted to Saldanha Bay as an alternative harbour, or perhaps more as an adjunct to that of Table Bay, owing to the great pressure and block in the Cape Town Docks; and a syndicate, which has bought up a good deal of the land in the neighbourhood, is proposing to build a railway across country to Porterville Road Station on the main line to Johannesburg and to develop the port. They also intend to bring fresh water to supply the proposed harbour from the Berg River, about twenty miles inland, by pumping it through a series of pipes running across country over the hills.

It had long been my intention to pay a visit to Saldanha Bay and to some of the bird-islands there, and this was rendered more easy by the enterprise of Messrs. Bucknell Brothers, who now run a small steamer there every week, leaving on Friday and returning on Tuesday.

Embarking at the Cape Town Docks in the early morning of September 25th last in the s.s. 'Blairgowan,' we reached Hoetjes Bay, the name given to the northern portion of

Saldanha Bay, where a small village is situated, about 6 P.M. Very few Duikers (Cormorants) were seen in the Cape Town Harbour, where they are usually numerous, but plenty of Gulls of both our common species (*Larus dominicanus* and *L. hartlaubi*) were circling and wheeling about among the ships in the docks, and occasionally settling down on the water to pick up the garbage floating there. As soon as we were well away from the harbour several Cape Hens (*Majaqueus aequinoctialis*) began to follow in our wake. These birds are very easily recognised by the little white patch under the chin, all the rest of the plumage being smoky black; their wings are long and narrow, and their flight is very Albatross-like. Although I watched them for a long time I never could see them flap their wings; they appeared to float in the air, depending entirely on the aeroplane system to keep them up, while ranging to and fro across the wake of the ship, and wheeling round with the points of the wing turned respectively down to the water and up to the sky. Only once did they settle on the water; this was when some scraps were thrown out from the galley, on seeing which they immediately sank down to the water and commenced to feed.

Off Robben Island we began to see a few Duikers. Their flight is a great contrast to that of the Cape Hens; they are generally found in small parties of three or four, and follow one another in a long line with a straight flight, not very high above the surface of the water, flapping their wings the whole time. Hereabouts, too, the Penguins began to be fairly numerous, swimming and diving in parties of ten or twelve. Some distance away a few Terns were observed fishing, plunging down into the water like falling stones and recovering themselves very rapidly. They were too far off to identify, but were probably the Common Tern (*Sterna fluviatilis*). As we neared Saldanha Bay the Malagas (*Sula capensis*) began to appear in large numbers, flying back towards Malagas Isle from the fishing-grounds around. During the voyage I was rather surprised not to see any Cape Pigeons (*Daption capensis*), Mollymawks (*Diomedea*

exulans), or Giant Petrels (*Ossifraga gigantea*); they had probably started for their breeding-grounds in the Crozettes and other islands far away to the south.

We arrived at Hoetjes Bay about 6 p.m., and I at once made arrangements to visit some of the bird-islands on the following day. These are five in number, and are all, like Dassen Island, the property of the Colonial Government, which works them chiefly for the guano produced yearly by the millions of birds nesting there.

Early the next morning Mr. Kasner, who is in charge of Marcus, and has been connected with the islands for the greater part of his life, took a friend and myself off to visit Jutten Island, outside Saldanha Bay, a little to the south of the narrow entrance. This island differs from most of the others in having a small kopje, perhaps about fifty feet in height, in the centre. All round, about twenty or thirty yards from the sea, there is a low stone wall built to keep out the Penguins, and within the enclosure thus formed were to be seen 'Trek-Duikers' (*Phalacrocorax capensis*) nests in thousands, the greater part of the island being covered with birds just commencing to breed.

The nests, which are about a foot in diameter, are placed on the ground, and are made of the stems of plants and grasses growing on the islands. The eggs, three to five in number, are regular ovals, almost equally pointed at both ends. They are chalky in texture and white with pale blue underlying the white; the average measurement is 55×34 mm. (about $2\frac{1}{4} \times 1\frac{3}{8}$ inches).

Hovering overhead were a good many Gulls of two species (*Larus dominicanus* and *L. hartlaubi*). These are terribly destructive, and carry off all the eggs and young Duikers left unguarded by their parents. I was told that the Gulls nested on the kopje in the centre of the island. As the Duikers are very easily scared, we were not allowed to go within the enclosure, but we found a few birds nesting outside, and were able to secure some eggs.

On some rocks by the shore were several Bank-Duikers (*Phalacrocorax neglectus*) also sitting on their nests. The

Bank-Duiker can be at once distinguished from the Trek-Duiker by its greater size and by the absence of all trace of yellow at the gape, the skin in this region being dark like the rest of the plumage. In the older birds a patch of white, more or less developed, appears on the rump, and is often conspicuous when the bird is flying. The Bank-Duiker feeds chiefly on crayfish (*Palinurus*) and Hottentot fish (*Cantharus blochi*), which are found about parts of the sea-bottom where there are rocks overgrown with seaweed; and by watching the places to which the Bank-Duikers resort for fishing in the early morning, fishermen are able to discover the best fishing-banks. It is from this fact that the Bank-Duiker derives its name.

The nest of this Duiker is quite different from that of the Trek-Duiker; it is formed entirely of algae, polyzoa, and hydroids, matted together into a flat cushion which is placed on the smooth top of a rock near the sea. The eggs resemble those of the Trek-Duiker in structure and colour, but are somewhat larger, averaging 65×40 mm. (about $2\frac{1}{2} \times 1\frac{1}{8}$ inches). The Bank-Duiker is extraordinarily fearless, and will remain on its nest until the intruder is within a foot or two of it; in fact, it is not difficult to catch it by hand and thus secure specimens. In addition to the Duikers, there were still some Penguins on the island, and a few fresh eggs of these birds were secured. The breeding-season for the Penguins begins in May, but the eggs are collected all through May, June, and July, and the birds go on laying till August, when they are allowed to hatch out their eggs and go off to sea again. A few, however, can be found nesting during every month of the year.

Leaving Jutten Island we sailed across the mouth of the bay to Malagas Island, leaving that of Marcus on our right. This island lies just in the mouth of the bay, and is comparatively small, having produced last year, according to the Government returns, only 88 tons of guano against 378 collected from Jutten and 688 from Malagas. Marcus affords a breeding-ground chiefly for Trek-Duikers and, of course, Penguins, while I was told by my boatman,

Mr. Kasner (who has charge of the island), that a few of the large White-breasted Duikers (*Phalacrocorax lucidus*) and some large red-billed Terns (probably *Sterna bergii*) also nest there. As, however, my time was somewhat limited and the landing is rather difficult, I decided not to visit Marcus, but continued on to Malagas.

This island is surrounded by rocks and low cliffs from about ten to twenty feet in height, so that landing is not very easy, and it is necessary to spring from the stern of the boat on to the slippery rocks at the right moment if one wishes to arrive dry-shod.

The whole of the interior of this island is more or less flat, and is covered everywhere with countless numbers of the Cape Gannet or Malagas. They were sitting so closely that they were in many cases almost touching each other. They were not in the least disturbed by our approach; on the contrary, if we stepped among them they at once pecked at us with their powerful light blue beaks, with which they could easily effect a nasty wound. At the time that we landed the breeding-season had just begun. The nest consists of a little mound of mud and guano with a slight depression at the top, while everywhere between the nests the ground is quite bare, and white with the deposit of guano. Only one egg is laid: on this the bird sits very closely, covering it with its large webbed feet. The eggs, of which I secured a good number, were extremely dirty, even when they seemed to have been freshly laid. The colour is almost pure white and the shape oval; the average dimensions are 80×50 mm. (*i. e.* $3\frac{1}{8} \times 2$ inches).

All the time that I was watching the birds fresh individuals were constantly arriving from the sea and others starting off again, while there was a good deal of noise—a kind of raucous squeaking. There was also much quarrelling and fighting going on among the birds; one individual, in particular, I noticed with the whole of its neck ripped open and streaming with blood. Altogether it was certainly the most remarkable assemblage of birds that I have ever witnessed.

A few Duikers of three species (*Phalacrocorax capensis*, *P. neglectus*, and *P. africanus*) nest on this island. I took some eggs of the little long-tailed or crowned species (*P. africanus*). Their nests, like those of the Trek-Duiker, are woven from the stalks of weeds growing on the island, not from seaweed; they are placed, as a rule, in crevices or on the tops of flat rocks, but not on the ground. The eggs, from two to four in number, are like those of the Trek-Duiker, but are somewhat smaller, measuring about 47×32 mm. (i. e. $1\frac{7}{8} \times 1\frac{1}{4}$ inches). When sitting on their nests the little Duikers can be at once distinguished by the crest of short feathers on the top of the head, whence they are generally known among the island men as "Crown-Duikers"; the iris, too, is bright red in colour and forms a very prominent feature, as it can be seen at some distance.

The following day we started off again early in the morning to visit the southern end of the bay. Just south of the entrance there are two small islands known as Schaap (i. e. *Sheep*) and Meu or Meuven. These, like the other islands, are reserved by the Colonial Government, although no guano is collected there; they are, however (especially Meu), the resort of countless numbers of Gulls of two species, both for roosting and nesting. As the Gulls are very destructive to the eggs and young birds of the guano-producing "Duikers" and "Malagas," their eggs and young are destroyed during the breeding-season, especially on these islands.

On landing on Schaap Island I found that in addition to the Gulls there were a few Crown-Duikers (*Phalacrocorax africanus*) there, but no Trek- or Bank-Duikers. Most of the Crown-Duikers had nests among the pointed rocks on the outskirts of both the islands, but I found that a few had also occupied some old and apparently dead thorn-bushes (*Acacia*) which grew more towards the centre of Meu Island. I was much disappointed that I was too early for the Gulls, as I was unable to find a single pair breeding. I was informed that they built their nests on the ground among the rank growth of a species of tansy, which covered the greater part

of the flat interior of both Schaap and Meu Islands. The larger Gull (*Larus dominicanus*) breeds in October, as I was informed, while the smaller (*L. hartlaubi*) nests in June. In addition to the Gulls there were a number of Black Oyster-catchers, or "Tobies," as they are called locally (*Hematopus moquini*). These were generally seen in pairs standing about the rocks, and were too cautious to allow a very near approach. We also saw quite a number of Egyptian Geese (*Chenalopez ægyptiacus*), called Spur-winged Geese locally, Rock-Doves (*Columba phænota*), which breed in an old semi-submerged hulk not far away, Sanderlings (*Calidris arenaria*), and Sand-Plovers (*Ægialitis marginata*), besides Wagtails (*Motacilla capensis*) and Scisjes (*Serinus*).

These two islands share with Robben Island in Table Bay the distinction of being the only places where the European rabbit has established itself in South Africa. They are very plentiful here, but difficult to shoot as the vegetation is thick and high. The history of their introduction is not known, but they have been on the islands since the time of Levaillant, one hundred and twenty-three years ago, and it would be interesting to compare them with those inhabiting England to see whether their long isolation has produced any effect on their structure.

Beyond the islands the bay extends for another eight or ten miles up, where it is called the lagoon. The water here becomes a good deal shallower, and there are many sandbanks of considerable size. On the banks here, when covered with from eight to twelve inches of water, there are vast flocks of Flamingos (*Phanicopterus*). They can be seen at a great distance, and then appear like a row of white dots on the surface of the water. On a nearer approach their shape and attitude can be more clearly made out, and they are seen to be wading to and fro searching for food with their heads down on the sandy bottom. If a shot is fired at them they rise and fly off to another part of the lagoon, and it is only when this occurs that the crimson and black of the wings become visible. When flying their appearance is very peculiar, as the neck is stretched out straight in front and

i. *Islands on the Coast of Cape Colony.*

	Tons of guano collected in 1902.	Number of Penguin eggs gathered in 1902.	Chief guano-producing birds.
Bird Island in Algoa Bay ..	197	....	Malagas.
Dyer's Isle, nr. Danger Point in Caledon Division	253½	26,400	[Penguins. Trek-Duikers and
Seal Island in False Bay ....	....	....	....
Duiker Klip, nr. Hout Bay in Cape Division	3	....	Trek-Duikers.
Dassen Island, 60 miles north of Table Bay	240¼	325,000	[Penguins. Trek-Duikers and
Foundling's Island, south of Saldanha Bay	93	....	Trek-Duikers
Jutten Island, Saldanha Bay.	378¼	98,000	" "
Marcus Isle, Saldanha Bay ..	88¼	20,000	" "
Malagas Island, Saldanha Bay.	688½	....	Malagas.
Paternoster Isle, north of Saldanha Bay	69¾	....	Trek-Duikers.
Islands in Lambert's Bay, Clanwilliam Division	321¼	....	" "
Elephant's Rock, off Olifant's River, Van Rhyn's Dorp Div.	25	....	" "
Total	2357	469,400	

ii. *Islands on the Coast of German South-west Africa from the North southwards.*

	Tons of guano collected in 1902.	Chief guano-producing birds.
Hollam's Bird Isle	50	Trek-Duikers.
Mercury Isle	120	" "
Ichaboe	1300	Trek-Duikers and Malagas.
Possession Island	600	" " "
Sinclair's and Plum-pudding Islands	120	Trek-Duikers.
Halifax Island	160	" "
Pomona Island	80	" "
Penguin Seal Isle	15	" "
	2445	
Add Colonial Islands	2357	
Total no. of tons of guano collected during 1902 for the Cape Government ..	4802	

the legs behind. I was told that they stayed in the water all night, and that they could then be easily approached and shot; certainly during the day it was impossible to get anywhere near them. Both species (*Phaenicopterus roseus* and *P. minor*) are said to be found in Saldanha Bay. The birds which I saw seemed to me to be of the larger species, but it was difficult to be certain as I could not get sufficiently close. The Flamingos do not breed at Saldanha Bay, but migrate northwards, probably to Lake Ngami and other marshy lakes in German South-west Africa; in October, however, there are always a few to be found about the lagoon.

The following day the weather was not very favourable for excursions, and I did not go far from the hotel. On the day after, when I returned to Cape Town, the weather still continued stormy and unpleasant, though it did not affect the steamer much, as the wind blew directly from the north in a direction favourable to our course.

In a former paper (*Ibis*, 1896, p. 519), containing a description of a visit to Dassen Island, I gave some account of the guano islands and of their administration by the Colonial Government. Perhaps I may supplement this with a few additional facts and figures chiefly derived from the Report of the Superintendent of the island, Captain Jackson, for last year (1902).

On p. 87 is given a list of the islands and the yield of guano and Penguins' eggs during the year in question, commencing at Port Elizabeth and passing along the coast to the Ichaboc Group off German South-west Africa.

VII.—*On further Collections of Birds from the Efulen District of Cameroon, West Africa**. By R. BOWDLER SHARPE, LL.D. &c.—Part I.

(Plate II.)

Mr. G. L. BATES has sent us further collections from Efulen,

* [See '*Ibis*,' 1902, p. 89, for an account of the previous collection and for information on the locality. Efulen is a village in the German colony of "Kamerun," about forty miles from the Port, Great Batanga.—EDD.]